

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for recovering at least one metal value from a metal-bearing material, comprising the steps of:

a) pressure leaching a metal-bearing material with a liquid an acidic solution to yield a residue and a metal-bearing solution;

b) adjusting the pH of said metal-bearing solution using a chemical pH adjustment step in combination with a dilution step to form a pH-adjusted metal-bearing solution, wherein the pH of said pH-adjusted metal-bearing solution is less than about 2.2 and wherein said dilution step is performed using a ratio of said metal-bearing solution to a diluting solution of less than 1:10; and

~~c) diluting said pH-adjusted metal-bearing solution with a diluting solution to form a diluted metal-bearing solution, wherein a ratio of said metal-bearing solution to said diluting solution is less than 1:10 and the pH of said diluted metal-bearing solution is less than about 2.2; and~~

d) ~~c)~~ solvent extracting at least one metal value from said pH-adjusted ~~diluted~~ metal-bearing solution.

2. (Previously presented) The process of claim 1, wherein in said diluting step, the ratio by volume of said metal-bearing solution to said diluting solution ranges from about 1:4 to about 1:8.

3. (Previously presented) The process of claim 1, further comprising providing an extraction reagent for use in said step of solvent extracting said at least one metal value from said diluted metal-bearing solution.

4. (Previously presented) The process of claim 3, wherein said step of providing an extraction reagent comprises providing at least one of an aldoxime, a modified aldoxime, and an aldoxime/ketoxime mixture.

5. (Canceled)

6. (Previously presented) The process of claim 1, wherein said pressure leaching step comprises high temperature pressure leaching at a temperature from about 210°C to about 235°C.

7. (Previously presented) The process of claim 1, wherein said pressure leaching step is at superatmospheric pressure at a temperature of about 225°C in an oxygen-containing atmosphere.

8. (Previously presented) The process of claim 1, further comprising the step of comminuting said metal-bearing material prior to the step of pressure leaching.

9. (Previously presented) The process of claim 8, wherein said comminuting step comprises comminuting said metal-bearing material to a P80 of less than about 75 microns.

10. (Previously presented) The process of claim 1, further comprising the step of recovering any precious metals contained in said pressure leaching residue.

11. (Withdrawn) The process of claim 2, further comprising the step of electrowinning said at least one metal value from said solvent extraction step.

12. (Canceled)

13. (Withdrawn) A metal recovery process comprising the steps of:

- a) providing a metal-bearing material;
- b) comminuting said metal-bearing material to provide a comminuted metal-bearing material in a slurry form;
- c) subjecting said slurry to flotation to separate metal-bearing materials and to form a concentrated metal-bearing material;
- d) pressure leaching said concentrated metal-bearing material at a temperature in the range of about 210°C to about 235°C in an oxygen-containing atmosphere in a sealed, agitated multiple-compartment pressure leaching vessel to form a product slurry;
- e) separating said product slurry into a metal-bearing solution and a solids-containing residue;
- f) adjusting the pH of said metal-bearing solution to a pH of less than about 2.2 by combining said metal-bearing solution with a make-up diluting solution to yield a pH-adjusted metal-bearing solution, wherein the ratio of said metal-bearing solution to said make-up diluting solution is in the range of from about 1:4 to about 1:8;
- g) solvent extracting and electrowinning said pH-adjusted metal-bearing solution to yield an acid-containing raffinate solution;
- h) applying said acid-containing raffinate solution in a heap leaching operation.

14. (Withdrawn) The process of claim 13, further comprising the step of subjecting said residue of step (e) to a further processing.

15. (Withdrawn) The process of claim 14, wherein said step of further processing comprises precious metal recovery.

16. (Withdrawn) The process of claim 14 wherein said step of further processing comprises impounding.

17. (Withdrawn) The process of claim 13, wherein in said solvent extracting step, said pH-adjusted metal-bearing solution is contacted with an extraction reagent comprising an aldoxime/ketoxime mixture.

18. (Withdrawn) The process of claim 13, wherein said step of adjusting the pH of said metal-bearing solution comprises combining said metal-bearing solution with a make-up diluting solution to yield a pH-adjusted metal-bearing solution wherein the ratio of said metal-bearing solution to said make-up diluting solution is in the range of from about 1:4 to about 1:8 and the pH of said pH-adjusted metal-bearing solution is from about 1.4 to about 1.8.

19. (Currently Amended) A process for recovering at least one metal value from a metal-bearing material, comprising the steps of:

- a) pressure leaching a metal-bearing material with ~~a liquid~~ an acidic solution to yield a residue and a metal-bearing solution;
- b) adjusting the pH of said metal-bearing solution, without use of a diluting solution, in a chemical pH adjustment step, such that the pH of said metal-bearing solution is less than about 2.2 prior to entering the solvent extraction step;
- c) solvent extracting at least one metal value from said diluted metal-bearing solution.